

## CLAIMS

What is claimed is:

- [c1] 1. A method for an auction-based shopping server system to establish a wireless marketplace for selling products to users of wireless cellular telephones via Dutch auctions, the method comprising, under control of the shopping server system:
- receiving information for each of multiple users of wireless cellular telephones that indicates one or more categories of products of interest to that user;
  - for each of multiple sellers of products, assisting the seller in establishing a sales campaign for each of one or more Dutch auctions, by
    - for each of one or more products that are each to be offered by the seller as part of a Dutch auction, receiving description information from the seller of a planned sales campaign for the Dutch auction for the product, the description information indicating multiple copies of the product available as part of the Dutch auction and indicating criteria for buyers to win the Dutch auction so as to acquire one or more of the multiple available copies;
    - for each of the Dutch auction sales campaigns, determining multiple of the users of the wireless cellular telephones that are appropriate for the sales campaign, the determining of the appropriate users based at least in part on the product category interest information received from those users; and
    - for each of the users determined to be appropriate for a Dutch auction sales campaign, sending a notification message to that user of the Dutch auction, the sent notification message being an SMS message such that the user can place a bid for one or more of the copies of the product available as part of that Dutch auction by replying to the notification SMS message; and
    - assisting in completing multiple of the Dutch actions by, for each of those Dutch auctions,

receiving bids from multiple of the users that are each for one or more of the copies of the product available as part of the Dutch auction, the bids received as SMS messages;

determining winners of the Dutch auction based at least in part on the received bids and on the indicated criteria for the Dutch auction;

notifying the seller for the Dutch auction of the determined winners of the Dutch auction and/or notifying each of the determined winners of the Dutch auction of a quantity of copies of the product for the Dutch auction that the determined winner has won; and

delivering the copies of the product for the Dutch auction to the determined winners of the Dutch auction by,

for each of one or more of the determined winners, notifying that determined winner of a geographical pick-up location at which to obtain the one or more copies of the product that that determined winner has won and providing those copies of the product to that determined winner at that pick-up location; and

for each of the determined winners that are not notified of a geographical pick-up location, obtaining a geographical delivery location from that determined winner and delivering the one or more copies of the product that that determined winner has won to that delivery location,  
so that users of wireless cellular telephones can shop for products by receiving notification of Dutch auctions for the products and by placing bids on those Dutch auctions from their wireless cellular telephones.

[c2]           2.     The method of claim 1 wherein replies by the users to the notification SMS messages use Premium SMS to enable billing of those users based on the replies.

[c3] 3. The method of claim 1 including, under control of a computing device of one of the sellers:

sending description information to the shopping server system for a sales campaign for a Dutch auction for a product offered by the one seller; and

before receiving notification from the shopping server system of winners of the Dutch auction, monitoring the sales campaign by obtaining information from the shopping server system that indicates bids received from users for the Dutch auction.

[c4] 4. The method of claim 1 including, under control of the wireless cellular telephone of one of the users:

receiving a notification SMS message from the shopping server system for a sales campaign for a Dutch auction having multiple available copies of a product, the received SMS message indicating multiple options for responding with a bid for one or more of the available product copies; and

in response to an instruction from the one user, sending a reply SMS message for the received notification SMS message that includes a bid for multiple of the available product copies at a specified bid price, the included bid based on a selected one of the indicated multiple options for responding.

[c5] 5. The method of claim 1 including, under control of the wireless cellular telephone of one of the users:

receiving one or more SMS messages from the shopping server system that each indicate one or more categories of products of potential interest to the one user, the SMS messages received as part of a registration process for potential buyers; and

sending one or more response SMS messages to the shopping server system such that at least one of the sent response SMS messages indicates one or more categories of products of interest to the one user.

[c6] 6. The method of claim 1 including, under control of the wireless cellular telephone of one of the users:

requesting information from the shopping server system about currently available auctions, the requesting by sending one or more SMS messages to the shopping server system;

receiving in response indications from the shopping server system of multiple currently available auctions of which the one user was not previously sent notifications; and

in response to an instruction from the one user, initiating a bid for one of the indicated auctions by sending to the shopping server system an SMS message that indicates the one indicated auction and indicates a bid for that auction.

[c7] 7. The method of claim 1 wherein the criteria indicated for each of the Dutch auctions for buyers to win that Dutch auction includes a minimum bid price, and wherein the determining of the winners of each of the Dutch auctions includes repeatedly selecting a remaining unselected one of the buyers for that Dutch auction as one of the winners of that Dutch auction based on the bid price of that one buyer for that Dutch auction being highest among the bid prices for that Dutch auction of the unselected buyers and being above the minimum bid price for that Dutch auction, the selecting continuing until the selected winners have aggregately placed bids for each of the multiple available copies of the product for that Dutch auction or until there are no more remaining unselected buyers with bid prices for that Dutch auction above the minimum bid price for that Dutch auction.

[c8] 8. The method of claim 1 wherein the description information for the sales campaign for one of the Dutch auctions further indicates demographic information regarding users to be notified of the Dutch auction, and wherein the indicated demographic information is used by the shopping server system during the determining of the multiple appropriate users for that Dutch auction.

[c9] 9. The method of claim 1 wherein the description information from one of the sellers for the sales campaign for one of the Dutch auctions further indicates content for each of multiple messages that are each to be sent during an indicated one of multiple phases of the sales campaign to the users determined to be appropriate for the one Dutch auction, and wherein the assisting of the one seller in establishing the sales campaign for the one Dutch auction includes sending each of the multiple messages to each of those determined appropriate users as an SMS message during the indicated phase of the sales campaign for that message.

[c10] 10. The method of claim 1 including, under control of the shopping server system, receiving location-based information for one of the users in an automated manner, and using the received location-based information in the determining of that user as one of the multiple appropriate users for one of the Dutch auctions and/or in selecting that user as one of the determined winners for one of the Dutch auctions and/or in determining how to deliver to that user one or more product copies that the user won for one of the Dutch auctions and/or in automatically determining a billing procedure for that user for one or more product copies that the user won for one of the Dutch auctions.

[c11] 11. A computer-implemented method for selling items to users of wireless devices via auctions, the method comprising:  
receiving information about multiple users of wireless devices;  
receiving information about an auction for one or more items available from a seller;  
automatically selecting a subset of the multiple users to notify about the auction as potential buyers for one or more of the items from the auction;  
sending messages to the selected users that indicate the auction for the one or more items and that indicate multiple options for responding;  
obtaining response messages from multiple of the users that each specify at least one of the multiple options; and

automatically selecting one or more of the users from whom response messages were obtained to purchase one or more of the items from the auction based at least in part on the response messages.

[c12] 12. The method of claim 11 wherein the method is performed for each of multiple auctions, and wherein at least some of the auctions are Dutch auctions.

[c13] 13. The method of claim 12 wherein each of the auctions is a Dutch auction, and wherein each of the Dutch auctions offers multiple items that are copies of a single product such that multiple users are selected to each purchase at least one of the items.

[c14] 14. The method of claim 12 wherein each of the Dutch auctions includes minimum criteria that must be satisfied by a user providing a response message in order for that user to be selected to purchases one or more of the items from the auction.

[c15] 15. The method of claim 11 wherein the method is performed for each of multiple auctions, and wherein each of the auctions use a traditional auction format.

[c16] 16. The method of claim 11 wherein the method is performed for each of multiple auctions, and wherein each of the auctions use a reverse auction format.

[c17] 17. The method of claim 11 wherein each of the auctions offers multiple items, and wherein the multiple items of each of the auctions are such that two or more of the multiple items are of a distinct type.

[c18] 18. The method of claim 11 wherein the messages sent to the selected users are SMS messages.

- [c19]            19.    The method of claim 11 wherein the response messages from the users are SMS messages.
- [c20]            20.    The method of claim 11 wherein the messages sent to the selected users and the response messages from the users are MMS messages.
- [c21]            21.    The method of claim 11 wherein the messages sent to the selected users and the response messages from the users are instant messages.
- [c22]            22.    The method of claim 11 wherein each of the response messages from one of the users is generated by an application executing on the wireless device used by that user.
- [c23]            23.    The method of claim 22 wherein the executing applications are applets sent to the wireless devices by a computing device executing the method.
- [c24]            24.    The method of claim 11 wherein the received information about the auction indicates information related to a sales campaign for the auction, and including executing the sales campaign for the auction based at least in part on the indicated information.
- [c25]            25.    The method of claim 24 including providing status information about the execution of the sales campaign to the seller during the execution so as to enable the seller to monitor the sales campaign.
- [c26]            26.    The method of claim 24 wherein the received information related to the sales campaign indicates a type of user that is appropriate for the auction, and wherein the selecting of the subset of users to notify about the auction includes selecting users of the indicated type.

[c27] 27. The method of claim 24 wherein the information related to the sales campaign includes information related to multiple messages that have specified content and that are each to be sent to each of the selected users when distinct specified conditions are satisfied, and wherein the executing of the sales campaign includes sending each of the multiple messages to each of the selected users when the specified conditions for that message are satisfied.

[c28] 28. The method of claim 11 wherein the received information from the seller about the auction includes indications of content for each of multiple messages that are to be sent to appropriate users before completion of the auction, wherein the message sent to the selected users includes the content indicated for one of the multiple messages, and including sending a series of other messages to the selected users such that each of the messages in the series includes the indicated content for one of the other multiple messages.

[c29] 29. The method of claim 11 including notifying users other than the selected users in a manner other than by sending messages to the other users.

[c30] 30. The method of claim 11 including notifying users about the auction in a broadcast manner.

[c31] 31. The method of claim 30 wherein the broadcast notifying of users about the auction includes advertising the auction using an information distribution medium in such a manner that the advertising is available to all users with access to the information distribution medium.

[c32] 32. The method of claim 11 wherein the sending of the messages to the selected users that indicate the auction is performed by sending a single message to each of multiple available users, and wherein the selected users are a subset of the multiple available users.



- [c33]            33.    The method of claim 11 including notifying users about the auction in a targeted manner by advertising the auction using an information distribution medium in such a manner that the advertising is available to only designated users with access to the information distribution medium.
- [c34]            34.    The method of claim 11 including receiving a response message from a user other than one of the selected users that includes a bid amount, and wherein the automatic selecting of the users includes selecting the other user.
- [c35]            35.    The method of claim 11 wherein the received information about the multiple users includes information received from each of at least some of the users that indicates preferences of that user regarding receiving information about items, and wherein the selecting of the subset of users to notify about the auction for the available items is based at least in part on the received preference information.
- [c36]            36.    The method of claim 35 wherein the preference information received from at least some of the users indicates one or more types of items of interest to those users, and wherein the preference information from each of those users is received via one or more SMS messages from that user that are responses to messages sent to that user as part of a registration process.
- [c37]            37.    The method of claim 35 wherein the received preference information from each of those users is received via one or more MMS messages.
- [c38]            38.    The method of claim 35 wherein the received preference information from each of those users is received via one or more instant messages.
- [c39]            39.    The method of claim 35 wherein the received preference information from each of those users is provided by an applications executing on the wireless devices of those users.

- [c40] 40. The method of claim 35 wherein the received preference information from each of those users is received as part of a registration process initiated by a computing system executing the method.
- [c41] 41. The method of claim 35 wherein the received preference information from each of those users is received as part of a registration process initiated by that user.
- [c42] 42. The method of claim 11 including billing each of the selected users for the items purchased by that user.
- [c43] 43. The method of claim 42 wherein at least some of the multiple options for responding indicated by the messages sent to the selected users are such that performing the responding for those options generates an event that is billable to a user performing the responding, and wherein the billing of the selected users is based on the generated events for the selected users.
- [c44] 44. The method of claim 42 wherein the billing of the selected users is based on Premium SMS.
- [c45] 45. The method of claim 42 wherein the billing of the selected users is performed using a billing mechanism provided by a wireless service operator that provides service to the wireless devices of the selected users.
- [c46] 46. The method of claim 42 wherein the billing of the selected users is performed by charging credit cards of the selected users.
- [c47] 47. The method of claim 42 wherein the billing of the selected users is performed via store credit for the selected users that is provided by the seller.

- [c48]            48.    The method of claim 42 wherein the billing of each of the selected users is performed at a time of delivery to the selected user of the one or more items purchased by that selected user.
- [c49]            49.    The method of claim 11 including using Premium SMS to bill at least one of the selected users for a periodic subscription fee related to the auctions.
- [c50]            50.    The method of claim 11 including using Premium SMS to bill at least one of the selected users for a participation fee related to participating in the auction.
- [c51]            51.    The method of claim 50 wherein the participation fee is specific to the auction.
- [c52]            52.    The method of claim 11 including using Premium SMS to bill at least one of the selected users for a deposit fee related to the one or more items from the auction to be purchased by that user.
- [c53]            53.    The method of claim 11 including using Premium SMS to bill at least one of the selected users for a no-show fee related to that user not completing the purchasing of the one or more items from the auction for which that user was selected.
- [c54]            54.    The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information for one or more of the selecting of the subset of users, the sending of the messages, and the selecting of the one or more users.
- [c55]            55.    The method of claim 54 wherein the location-based information for the multiple users is received from an operator of a wireless service that is used by the wireless devices of those users.

[c56]            56. The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information for performing advertising for the auction at a physical location accessible to those users.

[c57]            57. The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information to assist the users in finding a physical auction location at which the users can receive the items from the auction that were purchased by those users.

[c58]            58. The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information to assist the users in finding a physical retail store at which the users can obtain the items from the auction that were purchased by those users.

[c59]            59. The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information for delivering to those users the items from the auction that were purchased by those users.

[c60]            60. The method of claim 11 including receiving location-based information for one or more of the multiple users, and using the received location-based information for obtaining payment from those users for items from the auction that were purchased by those users.

[c61]            61. The method of claim 11 wherein at least one of the multiple options for responding is to place a bid for one or more of the available items, and wherein at least some of the response messages each specify a bid amount for a specified group of one or more of the available items.

[c62]           62.    The method of claim 61 wherein the selecting of the users to purchase the items includes using the specified bid amounts from the response messages obtained from the selected users to determine a purchase price for the available items.

[c63]           63.    The method of claim 11 including, after the selecting of the users, notifying the selected users via an SMS message.

[c64]           64.    The method of claim 11 including, after the selecting of the users, notifying the seller of the purchasing of the available items by the selected users.

[c65]           65.    The method of claim 11 wherein the wireless devices are wireless telephones.

[c66]           66.    A computer-readable medium whose contents cause a computing device to offer items to wireless telephone users, by performing a method comprising:

                receiving information about one or more available items;

                notifying multiple users of wireless telephones about the available items;

                obtaining messages from multiple of the users that are each sent by one of the users via one of the wireless telephones and that each specify a level of interest of the user in one or more of the available items; and

                selecting one or more of the users from whom messages were obtained to receive one or more of the items based at least in part on the response messages.

[c67]           67.    The computer-readable medium of claim 66 wherein the items are available as part of an auction using a traditional auction format.

[c68]           68.    The computer-readable medium of claim 66 wherein the items are available as part of an auction using a Dutch auction format.

- [c69]            69.    The computer-readable medium of claim 66 wherein the items are available as part of an auction using a reverse bidding format.
- [c70]            70.    The computer-readable medium of claim 66 wherein the items are available as part of a fixed price offer.
- [c71]            71.    The computer-readable medium of claim 66 wherein the items are available using a price guessing mechanism.
- [c72]            72.    The computer-readable medium of claim 66 wherein the items are available using a price naming mechanism.
- [c73]            73.    The computer-readable medium of claim 66 wherein the items are available using a one-price bidding mechanism.
- [c74]            74.    The computer-readable medium of claim 66 wherein the items are available using a last minute sales mechanism.
- [c75]            75.    The computer-readable medium of claim 66 wherein the items are available using a mass buying mechanism.
- [c76]            76.    The computer-readable medium of claim 66 wherein the items are available using a mass selling mechanism.
- [c77]            77.    The computer-readable medium of claim 66 wherein the messages obtained from the multiple users are SMS messages and wherein the notifying of the multiple users is performed using SMS messages.
- [c78]            78.    The computer-readable medium of claim 66 wherein the method further includes using Premium SMS to bill at least some of the notified users in such a manner as to reflect their participation in the offering of the available items.

- [c79]            79.    The computer-readable medium of claim 66 wherein the notifying of the multiple users is performed in a manner that does not use the wireless telephones of the users.
- [c80]            80.    The computer-readable medium of claim 66 wherein the notifying of the multiple users is performed via a broadcast mechanism available to the multiple users and to others.
- [c81]            81.    The computer-readable medium of claim 80 wherein the broadcast mechanism is television.
- [c82]            82.    The computer-readable medium of claim 80 wherein the others include users of wireless devices other than wireless telephones.
- [c83]            83.    The computer-readable medium of claim 80 wherein the available items are made available as part of an ongoing selling mechanism, and including, after the notifying of the multiple users about the available items, providing multiple update notifications to the multiple users in such a manner as to allow the multiple users to monitor progress of the ongoing selling mechanism.
- [c84]            84.    The computer-readable medium of claim 83 wherein the providing of the update notifications to the multiple users is performed via the broadcast mechanism that is available to the multiple users and to the others.
- [c85]            85.    The computer-readable medium of claim 66 wherein the notifying of the multiple users is performed by providing IVR capabilities that supply information about the available items to each of the multiple users.
- [c86]            86.    The computer-readable medium of claim 85 wherein the supplying to each of the multiple users of the information about the available items via the IVR

capabilities is performed after that user initiates a telephone call to access the IVR capabilities.

[c87] 87. The computer-readable medium of claim 85 wherein the obtaining of the messages from multiple of the users includes receiving information supplied by those users via the provided IVR capabilities.

[c88] 88. The computer-readable medium of claim 66 wherein the computer-readable medium is a memory of a computing device.

[c89] 89. The computer-readable medium of claim 66 wherein the computer-readable medium is a data transmission medium transmitting a generated data signal containing the contents.

[c90] 90. The computer-readable medium of claim 66 wherein the contents are instructions that when executed cause the computing device to perform the method.

[c91] 91. A computing system for making items available to wireless telephone users via auctions, comprising:

a transaction manager component able to obtain information about multiple users of wireless devices and to obtain information about an auction for one or more available items, the auction having specified criteria related to determining one or more winners of the auction;

a messaging component able to send messages to at least some of the multiple users that indicate the auction for the one or more items and to obtain response messages from multiple of the users that each specify an interest of the user in acquiring one or more of the available items; and

a match finder component able to automatically determine one or more of the users to each acquire one or more of the available items from the auction based at least in part on the response messages.



[c92] 92. The computing device of claim 91 wherein the transaction manager component and the match finder component are executing in memory of the computing device.

[c93] 93. The computing device of claim 91 wherein the transaction manager component consists of means for obtaining the information about the multiple users and for obtaining the information about the auction, wherein the messaging component consists of means for sending messages to the users and for obtaining response messages from the users, and wherein the match finder component consists of means for automatically determining users to acquire the available items from the auction.